

Virginia TMDL Implementation Project Report

CUB, TURNIP & Buffalo Creeks

Virginia Nonpoint Source MANAGEMENT PROGRAM

Project Location and Background

Cub, Turnip and Buffalo Creeks are located in Appomattox, Campbell and Charlotte Counties, Virginia. An implementation project to address bacteria impairments on the creeks was initiated in 2006. The Virginia Department of Conservation and Recreation (DCR) contracted with the Robert E. Lee and Southside Soil and Water Conservation Districts (SWCDs) and provided funding from the Water Quality Improvement Fund (WQIF) towards project implementation. This project was awarded additional funding in July 2012 for the Appomattox County portion only (Robert E. Lee SWCD).

Implementation Highlights

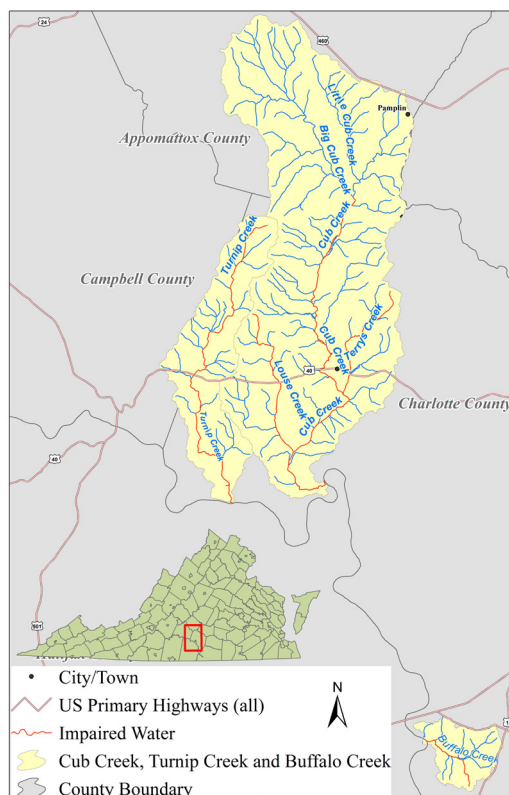
Table 1 lists BMPs implemented in the watersheds between 2006 and June 2015. DCR discontinued the implementation project at the end of FY2015. These BMPs were funded with state WQIF/VNRCF targeted TMDL cost-share funds. Total cost-share payments for these BMPs amounted to \$893,175 (\$543,806 through Southside SWCD and \$349,369 through Robert E. Lee SWCD). The improvement in water quality that followed (see below) reflects the cumulative impact of all BMPs implemented in the watersheds.

The stream fencing by Southside SWCD has been installed through TMDL fencing practices LE-1T (22,143 linear feet) and SL-6 (64,536), and CCI-SE1 voluntary practice (1,620 linear feet). Robert E. Lee stream fencing has been installed through the USDA Conservation Reserve Enhancement Program, CRSL-6 (4,100 linear feet), and TMDL fencing practices: LE-1T (12,800 linear feet), SL-6 (14,685 linear feet), and SL-6T (18,300 linear feet). This totals 26 miles of live-stock stream exclusion fencing installed in the watershed.

Table 1. Cub, Turnip, and Buffalo Creeks BMP Summary: 2006-2015

SWCD	*BMP code	Units	Installed
Southside SWCD	CCI-CNT	Acres	25
	CCI-SE1	Feet	1,620
	FR-1	Acres	105
	LE-1T	Feet	22,143
	SL-1	Acres	70
	SL-6	Feet	64,536
	SL-15A	Acres	53
	SL-3	Acres	12
	SL-8B	Acres	84
R.E. Lee SWCD	WP-4B	Syst.	1
	CRSL-6	Feet	4,100
	FR-1	Acres	27
	LE-1T	Feet	12,800
	SL-6	Feet	14,685
	SL-6T	Feet	18,300
	SL-8B	Acres	47

*For BMP code definitions, see Appendix 2 or visit the [DCR webpage](#).



Water Quality Monitoring Results

The *E. coli* bacteria standard that became effective in 2003 is the standard that has to be met to remove Cub, Turnip and Buffalo Creeks from the Impaired Waters List.

In 2015 Cub Creek became an EPA Success Story that was produced and submitted to EPA by DEQ. The success was based on DEQ removing 14.07 miles in Cub Creek from the impaired waters list based on the 2012 state-wide Water Quality Integrated Report. DEQ bacteria monitoring indicated that along the 14 plus miles the bacteria recreational contact standard was met. This was attributed to landowners implementing agricultural best management practices in the Cub Creek watershed since 2007.



For more information, contact:

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